

EXECUTIVE SUMMARY

The WIC State Agency Information System (IS) Profile is a compilation of information on each State agency's information system. The profiles cover topics such as system architecture; development plans; system functionality; hardware, software and communications; development and operating costs; and various technologies of interest to the WIC Program. The profiles provide a snapshot of the system operated by each WIC State agency during fiscal year 2001. All 88 WIC State agencies submitted a profile for inclusion in this report.

Functionality. WIC systems differ from State to State, and the degree of automation varies as well. In fiscal year 1999, a joint FNS/National WIC Association workgroup was formed to assist FNS in the development of a long-range strategic plan for WIC system development and implementation. The workgroup identified 24 automated functions that they believe every WIC system should perform in order to operate efficiently and effectively. These include complex functions such as automated income calculation, and tedious or redundant functions such as rejecting food instruments that exceed a maximum price. They also include functions that help ensure integrity in the WIC program such as the inclusion of edits to prevent overissuance in the food package. The 24 functions were further defined to create 30 core functions. The Profile results show that 89 percent of all State agencies perform 50 percent or more of these 30 core functions. While WIC systems are improving, only 41 percent have achieved between 75 and 100 percent of core functionality.

WIC systems have evolved and improved over time, however, improvements are still needed. With the early WIC systems, participant certification forms were hand-written, batched, and mailed to a central computer site for data entry. A turnaround document was sent back to the local agency for the participant's file. This procedure was done on a monthly basis to reflect each change in participant status and to correct data entry errors. Surprisingly, four State agencies (Washington, D.C., Puerto Rico, Kansas and Mississippi) still operate this "paper batch" system today. However, all of these State agencies are in the process of replacing this outdated mode of operations. Still, the use of hand-written certification forms exists in many clinics today. Eighteen State agencies indicated on their survey that there are insufficient computers to allow for data entry at the point of certification. Usually this means data is handwritten initially and entered in a PC on-site at the end of the day.

WIC System Development. The two largest WIC State agencies, California and New York, implemented new systems in 1996 and 2001 respectively. On a regional basis, the Mid-Atlantic Region has had more development activity in recent years than any other region. Six of the nine State agencies

in that region are in the process of developing new systems or have just implemented a new system. Among the new, recently implemented systems are: New Mexico (1998), Washington (1999), Alaska (1999), Hawaii (1999), Indiana (2000), New York (2001), and Pennsylvania (2002). Several small and mid-sized State agencies are exploring the concept of joint procurements in order to achieve economies of scale. This has worked well with many of the WIC Indian Tribal Organizations (ITO's) that currently use the WIC Indian Networking Data System (WINDS). WINDS is utilized by all nine of the Mountain Plains Region tribal organizations and three other ITO's outside the Region.

System Costs. Unlike the Food Stamp Program where there is a State match in Federal funds, WIC systems are nearly 100 percent federally funded. The primary source of funding is the WIC nutrition services and administration (NSA) grant. These grant funds are used to pay for nutrition services, vendor management, staff salaries, breastfeeding promotion and support, etc. Information system needs compete with all these other needs for the limited NSA funds available. The total funds spent on information systems in fiscal year 2001 was \$145.5 million, or 13 percent of the total NSA expenditures.

Of the \$145.5 million spent, new acquisitions (\$28.5 million) and major equipment upgrades (\$9.3 million) represented 20 percent and 6 percent respectively of the total expenditures, while on-going operations (\$107.6 million) accounted for 74 percent of the total expenditures. About 28 percent (or \$40.6 million) of the total funds spent in fiscal year 2001 were spent in California (\$20.4 million) and New York (\$20.2 million). The most significant system costs for WIC are on-going costs, particularly food instrument processing (\$22.4 million), operations (\$18.4 million), staffing (\$14.9 million), and telecommunications (\$10.0 million). Operations costs include the cost of CPU time, report printing, data storage, backup tape production, and other associated costs.

This Profile report is generally produced every 2 or 3 years. However, the last report was produced 5 years ago in fiscal year 1997. The system costs in fiscal year 1997 were approximately \$106.6 million. Thus total costs have increased about \$38.9 million or 37 percent in the 5-year period between 1997 and 2001. However, these figures are somewhat skewed by New York's recent procurement. Excluding New York, costs increased about 23 percent. It is important to note that five State agencies did not complete a profile report in fiscal year 1997 and six other State agencies did not report their on-going costs. Thus, the 1997 information is not comprehensive, and comparisons can only be used as estimates.

The costs shown in this report were incurred in fiscal year 2001. Development projects generally span 3 to 4 years. Currently, nine State agencies have obtained FNS approval via an Advanced Planning Document for the acquisition of a new system or transfer of an existing system. The estimated cost of these new acquisitions range from \$3.3 million in Washington, D.C. to \$7.5 million in Oregon, with an

average estimated cost among the nine State agencies of \$6.1 million. The most expensive systems to date were implemented in California (\$18 million) in 1996 and New York (\$33 million) in 2001.

Communications. Significant improvements were made between 1997 and 2001 in State agencies' ability to communicate via email and/or the internet. The number of State agencies connected to their FNS regional office increased by 35 percent; connected to other offices within the State, 38 percent; connected to their local agencies, 22 percent; connected to WIC clinics, 22 percent, and connected to other WIC State agencies, 68 percent. Improvements are still needed in communications between State agencies and their local agencies and clinics, as only about half of the State agencies have these electronic connections.

System Age. The majority of State agency systems, 62 percent, were implemented statewide sometime during the 7-year period between 1991 and 1998. Many of these systems will likely need replacing within the next few years. The oldest systems in existence at the time of this survey were located in Vermont and Washington, D.C. These systems were built in 1978 and 1981 respectively. Washington, D.C. is currently developing a new system to replace their old paper batch system. About 25 percent of State agency systems are relatively new, having been implemented within the past 4 years.

WIC's Place Within the Health Department. More and more States are moving toward one-stop shopping for clients. This is a slow process, requiring the restructuring of programs and systems. Nearly one quarter (23 percent) of all WIC systems are integrated with other systems within the State. More State agencies have integrated WIC systems in the southeast region than in any other region. Sixty-seven percent of WIC State agencies indicated that the WIC Program is part of a long-range information technology plan within the State.

WIC System Trends. The early WIC systems consisted of centralized databases with centralized data processing. Over the years, State agencies have slowly migrated toward decentralized, distributed client server systems, where client data are maintained and processed locally using one or more local area networks and file servers. With the advent of the internet and web browsers, many State agencies are now interested in developing a web-based WIC system. This is likely to be the next generation of WIC systems. However, this new technology has pros and cons for WIC, and at the time of this report, only one State agency, the Pennsylvania WIC Program, had ventured into this technology for the purpose of creating a WIC application on an intranet and had just completed Statewide rollout of this new system.

Electronic Benefit Transfer (EBT). The WIC Program provides about \$4 billion in food benefits to WIC participants annually. The vast majority of State agencies issue paper food instruments to

participants, which are then exchanged for food at the grocery store. While there are many advantages to an electronic benefit delivery system, State agencies have yet to find an affordable approach to WIC EBT. Nevertheless, FNS is committed to streamlining the food delivery, payment, and reconciliation process by replacing the paper food instrument with an electronic transaction. The Wyoming WIC Program has been the only WIC State agency to rollout EBT statewide. This was accomplished in March 2002. Eleven other State agencies have received grants to conduct EBT pilot projects. Thus far, the systems tested have utilized off-line technology. However, Michigan is planning to implement a partially on-line EBT pilot system in early 2003. Thus, the merits of an on-line WIC EBT system are yet to be explored and tested.

Conclusion. The WIC Program will face many challenges in the coming years. State WIC Programs will be challenged to maintain a quality nutrition program and still meet the ever increasing demands placed upon them to develop new technology, improve basic system functionality, replace aging systems, as well as maintain those systems, all within a limited budget. Without additional funds, it is likely that improvements in WIC systems will occur slowly over time.